

ESTABLISHMENT OF DRIP IRRIGATIION DEMONSTRATION PLOTS AT KABUBUNG'I, BATIAN FARMERS, KONGONI, CHUMVI AND WIUMIRIRIE COMMUNITY WATER PROJECTS OF NGUSISHI WATER USERS ASSOCIATION-NWUA

2. LEAD IMPLEMENTOR:

NGUSISHI WATER USERS ASSOCIATION-NWUA

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4. Partner Organizations

NWUA was last year - 2009, identified as a pilot River Users Association (RUA) by the Kenyan Government due to its proactive water management and its unique, transparent and equitable resource distribution and sharing which eradicated water conflicts, and its efforts to conserve the catchments areas and riparian lands.

Consequently the NWUA received a funding of ksh 3.8million from The Water Services Trust Fund (WSTF) in July 2009 to implement its Sub- Catchment Management Strategy which is currently being implemented with close monitoring by The Water Resource Management Authority (WRMA) at its' Ewaso Ng'iro North Catchment Area (ENNCA) Regional Office.

In this Project the NWUA will partner with WRMA-ENNCA to ensure the successful implementation of the project and results sharing to be applied by other RUAs in the Ewaso Ng'iro North Catchment Area (ENNCA)

5. Background/Introduction

The Association is composed of 14 member projects. Each Project has got its own water allocation at the intakes depending on its population, livestock and irrigable acreages. A 30% reserve is left to flow to take care of the wildlife and ecological requirement.

The Association has a well equipped office and two managers who carry out the day-to-day activities of the Association

The Association, in collaboration with other stake holders, undertakes population censures regularly in all its member projects to gauge water demand and come up with allocation criteria.

Ngusishi River originates from three springs namely, kabeere, Batian, and Muthuri springs. Due to over commitment in the upper reaches the Ngusishi River hardly flows 10km before drying up especially during the dry months of the year (January to March, August to October).

The persistent water shortages during the dry spells have often brought increased competition among users leading to conflicts between the upstream and downstream users where the downstream users often feel unprivileged and that water use upstream is to the detriment of their interests. This has, in the recent past, prompted the Association to explore other efficient ways of using the little water available to meet the demand of its members and secure the 30% reserve to flow without interference by illegal abstractors.

6. Project Concept

NWUA drip demonstration plots will focus on enabling the community members to understand the importance of using the little water available from their allocation to maximize utilization. It will demonstrate to the members that if the little water given from their project allocation is put into efficient use, they are able to get enough water for their domestic use, as well as to grow various crops for both domestic consumption and for the local market.

Through the use of drip irrigation the community members are going to use as little water as possible, compared to overhead sprinkling which wastes a lot of water.

NWUA is going to replicate this drip project to all its community project members and aims at ensuring that all households are able to access food, fodder and milk and get income to pay other household expenses using a quarter of an acre of land next to their houses

Currently The NWUA is sensitizing all its Community Water Project members the importance of the reserve flows in all Ngusishi river tributaries for the Ecological Importance. With funding to establish drip kits for demonstration plots NWUA will have made a great step towards securing the 30% reserve flow in Ngusishi River.

The illegal abstractions will be eradicated because the members will learn the efficient use of little water from their legal allocation to meet food requirements and get income from sale of vegetables, fruits and milk from their small farms.

7. Project Objectives

To increase its members' water use efficiency in order to meet the domestic water needs and increase water use value by creating small scale farms for vegetables, fruits and milk for higher food productivity and gain income to the households

NWUA is committed to ensuring that all its members utilize the legally allocated water from its springs and leave the 30% reserve flow for the government untouched.

By all its Community Projects members adopting drip irrigation NWUA will have successfully created a culture of using little water allocated to community projects to gain huge returns, as well as become fully compliant as far as eradicating illegal water abstractions from the river is concerned.

NWUA aims at replicating the positive results of this project to all its over 700 households to ensure that each of them is able to provide food, safe clean drinking water and milk therefore eradicating food poverty, waterborne diseases and securing a stable sustainable income to the households.

8. Activities and Approach

The project will involve the following activities

- Purchasing of 5 pieces of quarter-acre drip kits from suitable suppliers
- Purchase of dairy cows of suitable breed for the identified pilot farms
- Capacity building on the drip irrigation to the already identified pilot farmers
- Establishing the kits at the identified farms
- Conducting a series of trainings on drip farming techniques to other members of the community projects at the demonstration farms
- Keeping daily water use records for the drip farm for two seasons
- Constructing of a cowshed at farmer's cost as his in-kind contribution
- Keeping and analyzing the food production records from the drip irrigation farm to be used to compare with those from other farms of similar size and sensitize community members.

9. Time Frame

2 months from when the funds become available, NWUA will have established the 5 drip irrigation demonstration plots

10. Impact and out comes

- Little water allocated to the households will be enough for domestic and food/vegetable production thus eradicating food poverty
- Illegal Water abstractions from the reserved 30% in the river will be eradicated
- Members will get value for their water and payment of usage and membership fees will be enhanced
- Improved and sustainable farm revenues out of little resources, will be available for other household expenses like medicine and school fees

11. Estimated Budget

The following table outlines the full funding, in **Ksh**, required for the implementation of the five pilot projects:

No.	Item description	Amount-in Ksh	Total-Ksh
1	5 drip kits (fully	50,000@	250,000
	equipped)		

2	Drip Settings	10,000@	50,000
3	5 dairy cows	50,000@	250,000
4	5 cowsheds	50,000@	250,000
5	On-farm training on drip use	20,000@	100,000
6	Monitoring/data collection	5,000 @	25,000
7	Report production	10,000@	50,000
8	E-mails, airtime and other office consumables		25,000
9	Total funds required/requested		1,000,000